

CONDITION OF CERTIFICATION AQ-52
OFF-ROAD DIESEL FIRED EQUIPMENT USAGE LISTS

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

CONTRACTOR: Conco

DATE: April 2004

This form must be completed before site mobilization and must include all equipment that will be used on site.

****All diesel equipment must use ultra low sulfur diesel fuel. Engine idle time must be limited to 10 minutes or less.**

Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Forklift	2000	Gradall	534D-9	064433	100	9 months	09/08/03		1996 or newer
Crane	2001	Link Belt	HTC87	1F9F2J2592L 0284818	350	9 months	09/08/03		Exempt due to low duty cycle.
Manlift	2001	JLG	460 SJ	5439-136482- 46-1024	82	1 month	1/16/04	4/20/04	1996 or newer <100 HP

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR_Lloyd Aubry**DATE_April 2004**

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Equipment Type (Backhoe, loader, etc.)	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Portable Generator	2003	Colmen	Maxa 3000	83750207	5.5	Duration of job	Feb 2004		1996 or newer <100HP
Grout Mixer RSC	2003	Stone	655pm	022004096	8.0	30	2/27/04		1996 or newer <100HP
Grout Mixer RSC	2003	Stone	655pm	442003030	8.0	30	2/27/04		1996 or newer <100HP
Diesel Welder LWA	1999	Thermal Arc	Ta20/500dz	n/a	Under 100hp	Duration of job	2/27/04		1996 or newer <100HP
GRADALL RSC	1998	Grade All	5340-10	0366077	TBD	Duration of job	2/27/04		1996 or newer
Fork Lift RSC	2002	Daewood	s/s/mover 265500lb	Wj1e1	TBD	Duration of job	2/27/04		1996 or newer
Diesel Welder RSC 394163	2001	Lincoln	K1639-1	U1010902122	Under 100hp	Duration of job	3/10/04		1996 or newer <100HP
Diesel Welder RSC 394179	2001	Lincoln	K1639-1	U1010401132	Under 100hp	Duration of job	3/10/04	4/19/04	1996 or newer <100HP
Diesel Welder RSC 394164	2001	Lincoln	K1639-1	U1010902104	Under 100hp	Duration of job	3/10/04		1996 or newer <100HP
Diesel Welder prime rental	1999	Lincoln	K1639-1	U1991104990	Under 100hp	Duration of job	3/10/04	4/19/04	1996 or newer <100HP

CONTRACTOR_Lloyd Aubry

DATE_April 2004

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Diesel Welder RSC	2002	Miller	402D	LA255078	Under 100hp	Duration of job	3/29/04	4/19/04	1996 or newer <100HP
Aerial boom lift (Hertz rental)	2002	Genie	S-65	5915	Under 100hp	TBD	4/27/04		1996 or newer <100HP
Forklift (Hertz)	2001	Gradall	534D-9	0644026	Under 100hp	TBD	4/27/04		1996 or newer <100HP

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: O.C. MacDonald**DATE: April 2004**

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Generator	00	Whisper Watt	DB-06I	3640458	31	60	9/26/03		1996 or newer <100 HP
Generator	00	Whisper Watt	DCA-2555IU	7106672	30.6	60	10/27/03		1996 or newer <100 HP
Generator	03	Magnum	TGI	034009	31	60	1/23/04		1996 or newer <100 HP
Forklift	97	Lull	1044C-54	CL137	120	60	1/23/04		1996 or newer
Forklift	97	Lull	1044C-54	CL122	120	60	1/23/04		1996 or newer
Forklift	01	Skytrak	8042	10111A	116	60	11/6/03		1996 or newer
Forklift	02	Skytrak	8054	921285	116	60	3/15/04		1996 or newer
Compressor	02	Atlas Copco	XAS96(J D) CA	4500A061724 002500	<100	60	1/23/04		1996 or newer <100 HP
Welder	00	Lincoln	SA250D3	998784	44	60	1/23/04		1996 or newer <100 HP
Welder	89	Miller	402D	RDEM06587	44	60	1/23/04		<100 HP
Welder	00	Miller	402D	YE-M-247304	44	60	1/23/04		1996 or newer <100 HP
Welder	00	Miller	Big 40	KK022803	44	60	1/23/04		1996 or newer <100 HP
Welder	00	Miller	402D	YE-M-020246	44	60	1/23/04		1996 or newer <100 HP

CONTRACTOR: O.C. MacDonald

DATE: April 2004

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Fusion (8)		McElroy	Various	Various	15	60	1/23/04		<100 HP
Splitter	99	Iron and Oak	BH/H349 9H	1299JB/LCP R10494	13	60	1/23/04		1996 or newer <100 HP
4Wheel cart	96	Cushman	Hawk 4x2		18	60			1996 or newer

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: PSF**DATE: April 2004**

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Forklift	2003	Gradall	G9-43A	412-09-3019	100	8 months	12/29/03		1996 or newer
Forklift	2003	Gradall	G9-43A	412-09-3012	80-100	8 months	2/18/04	4/22/04	1996 or newer <100 HP
Forklift	2002	Gradall	G6-42A	412-06-1017	80-100	8 months	2/26/04	3/18/04	1996 or newer <100 HP
Generator	1999	Atlas Copco	QAS228	80941863	49	8 months	1/5/04		CARB permit number 106740
Generator	2003	Multi Quip	175 KW	549-96-1002	273	8 months	3/16/04		1996 or newer
Manlift	2002	Genie	S-125	481-93-2006	77	10 months	1/5/04		1996 or newer <100 HP
Manlift	2002	Genie	S-125	481-93-2026	77	10 months	1/12/04		1996 or newer <100 HP
Manlift	2002	Genie	S-125	481-93-2025	77	8 months	2/19/04	3/18/04	1996 or newer <100 HP
Manlift	2002	Genie	S-125	481-93-2003	77	8 months	2/19/04		1996 or newer <100 HP
4x4 Mule		Kawasaki		780-11-0004	<100	10 months	1/6/04		<100 HP
4x4 Mule		Kawasaki		780-11-1002	<100	8 months	3/1/04		<100 HP
Welding machine		Lincoln	Vantage 500	768-50-4011	40	5 months	1/2/04		<100 HP
Welding machine	2000	Lincoln	Comm500	768-50-0070	40	5 months	1/2/04		1996 or newer <100 HP

CONTRACTOR: PSF**DATE: April 2004**

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Air compressor	2001	Ingersoll Rand	Ingersoll 185	006-18-1439		6 months	1/2/04		1996 or newer
125' manlift	2002	Genie	S-125	481-93-2024	77	7 months	3/24/04		1996 or newer <100 HP
Forklift	2003	Gradall	G9-43A	412-09-3002	80-100	6 months	4/7/04		1996 or newer
Forklift	2003	Gradall	53409-45	412-09-3014	80-100	6 months	4/28/04		1996 or newer

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: Rosendin

DATE: April 2004

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Forklift	2002	Skytrak	8042 Legacy	17838	>100	90	9/11/03		1996 or newer
Compressor	2001	Atlas Copco	XAS 96	4500A06121 H613260	<100		10/10/03		1996 or newer
Forklift	1999	Spicer	SS842	142948	100	90	2/2/04	4/30/04	1996 or newer
Trencher	2001	Vermeer	S03550	1VRM080V7 X1000710	50	60	3/3/04		1996 or newer <100 HP

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: Sheedy Drayage Co.

DATE: April 2004

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Crane	1975	American	8460	2021	318	Periodically during construction	2/19/04		Exempt due to low-duty cycle.
Platform trailer	2001	Goldhofer	PST	0069	420	Periodically during construction	2/05/04		1996 or newer
JLG	2003	JLG	600AJ	030005798 1	40	4 months	2/23/04		1996 or newer <100 HP
Red Gantry	1989	Lift Systems	.48A	87818A	78	4 months	2/16/04		<100 HP
Yellow Gantry	1999	Lift Systems	48A	24035A	156	4 months	3/17/04		1996 or newer
Crane	1983	P&H	Alpha100	53112	335	3 Months	3/9/04		Exempt due to low-duty cycle.
Crane	1990	P&H	150	55786	167	3 Months	3/9/04		Exempt due to low-duty cycle.
Crane	1990	P&H	150	55150	167	3 Months	4/1/04		Exempt due to low-duty cycle.

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: Strocal

DATE: April 2004

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Equipment ID	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Forklift	01	Hyster	H360xL2	D019D03224 9Y	80	50 days	4/30/04		

CMM Signature: _____ Date: _____

Comments: _____

CONTRACTOR: Top Grade Construction**DATE: April 2004**

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Equipment Type	Year	Make	Model	Serial #	Engine HP	# of days equipment planned usage	Actual date usage started	Actual date usage stopped	Type of mitigation implemented (e.g., CARB, CDPF)
Mini Excavator	2003	Kobelco	SK80C-IE	LF02-01231	75		9/23/03		1996 or newer <100 HP
Excavator	1996	Hitachi	EX550	17HP007159	100		9/15/03		1996 or newer
Dump Truck	1998	Volvo	A35C	A35CV5258	100		10/18/03		1996 or newer
Forklift	2001	Hyster	360	D019D032284	127		11/4/03		1996 or newer
Dump truck	1998	Volvo	A35C	A35CV60064	100		1/30/04		1996 or newer
Backhoe	2004	CAT	436B	BHNFL00318	90		1/7/04		1996 or newer <100 HP
Skip Loader	2003	Terrex	650TX	TX65031105	60		1/28/04		1996 or newer <100 HP
Backhoe	2004	CAT	430D	CAT0430DPB NK04469	90		1/25/04		1996 or newer <100 HP
Dozer	1998	CAT	D4H	8PB6300	100		2/13/04		1996 or newer
Loader	1998	CAT	938F	KM00216	180		2/23/04		1996 or newer
Compactor	1999	Bomag	BW 211D-3	101580371015	90		3/1/04		1996 or newer <100 HP
Forklift	1997	CAT	TH103	3PN00618	80		3/3/04		1996 or newer <100 HP

CONTRACTOR: Top Grade Construction

DATE: April 2004

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Comments: _____

CONDITION OF CERTIFICATION AQ-52
CONTRACT LANGUAGE

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

Contract No MECXX.0000000246

CONTRACT

FOR

CONSTRUCTION SERVICES

by and between

CALPINE CORPORATION

and

NATIONAL STEEL ERECTION, INC.

Dated as of March 30, 2004

METCALF ENERGY CENTER

communications from Contractor. . All communications given to the Owner's Representative by Contractor in accordance with this Agreement shall be deemed effectively given to Owner.

- 19.20 Contractor's California contractor's State License Number is 1287268. Contractors are required by law in California to be licensed and are regulated by the Contractor's State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. Any complaint regarding a latent act or omission pertaining to structural defects may be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Register, Contractors' State License Board, and P.O. BOX 26000, SACRAMENTO, CALIFORNIA 95826.

IN WITNESS WHEREOF, the parties hereto have executed and entered into this Agreement as of the Effective Date.

Contract Number: MECXX- 00000000246

CONTRACTOR

OWNER

National Steel Erection, Inc
a Kentucky corporation

Calpine Corporation,
a Delaware corporation for the Metcalf Energy Center

By: Chuck Thompson
Title: PRESIDENT

By: [Signature] 4.23.04
Title: Sr. Vice President - Construction

CONTRACT
FOR
CONSTRUCTION SERVICES
by and between
METCALF ENERGY CENTER, LLC
and
CH2M HILL CONSTRUCTORS, INC.


Dated as of January 22, 2003

METCALF POWER PROJECT

IN WITNESS WHEREOF, the parties hereto have executed and entered into this Agreement as of the Effective date.

Contract Number: MECXX-0000000042

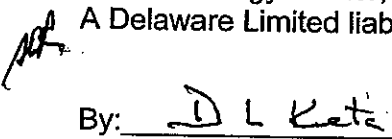
CONTRACTOR
CH2M HILL HILL Constructors, Inc.
A Delaware Corporation

By: 

Name: Mark E. Alpert

Title: Vice President

OWNER
Metcalf Energy Center, LLC,
A Delaware Limited liability Company

By: 

Name: Douglas L. Kieta

Title: Sr. Vice President - Construction

2/7/03
Final

EXHIBIT H-2

CALIFORNIA ENERGY COMMISSION **CONDITIONS OF CERTIFICATION**

Air Quality

Comply with Fugitive Dust Control Plan included as Attachment B to the Storm Water Pollution Prevention Plan and Erosion and Sediment Control and Stormwater Management Plan attached hereto as Attachment 1.

Mitigate, to the extent practical, construction related emission impacts from off-road, diesel-fired construction equipment as stated in the Diesel Mitigation Plan, Condition of Certification AQ-52 attached hereto as Attachment 2.

All heavy equipment shall not remain running at idle for more than ten (10) minutes to the extent practical.

Use ultra low sulfur fuel in diesel burning equipment.

Hazardous Materials

Quantity and strength of any hazardous material used on-site must be approved in advance by the CPM.

Comply with the Construction Waste Management Plan, attached hereto as Attachment 3.

Noise

Comply with Noise Control Plan included in the Metcalf Energy Center Safety Manual, Exhibit J.

SocioEconomics

Recruit employees and procure materials and supplies within the City of San Jose and Santa Clara County where possible in accordance with the Construction Phase Hiring and Procurement Plan, attached hereto as attachment 4.

Traffic and Transportation

Comply with Construction Traffic Control, Parking and Staging Plan, attached hereto as attachment 5.

Waste Management

Comply with Construction Waste Management Plan attached hereto as attachment 3.

Housekeeping, Fire Prevention and Protection Plan

Comply with the Housekeeping, Fire Prevention and Protection included in the Metcalf Energy Center Safety Manual, Exhibit J.

Worker Safety and Environmental Awareness

All on-site workers will attend pre-construction orientation covering areas such as biological, cultural (archaeological) awareness and receive safety training and information regarding the site Fugitive Dust Mitigation Plan, Injury and Illness Prevention Plan, Erosion Control Plan, Waste Control Program, Construction Traffic Control Plan and delivery route for hazardous materials.

Prepare and submit Contractor Construction Injury and Illness Prevention Plan.

Summary

Attachment 1 – Storm Water Pollution Prevention Plan and Erosion and Sediment Control and Storm Water Management Plan

Attachment 2 – Diesel Mitigation Plan

Attachment 3 – Construction Waste Management Plan

Attachment 4 – Construction Phase Hiring and Procurement Plan

Attachment 5 – Construction Traffic Control, Parking and Staging Plan

Exhibit J – Requirements for Housekeeping, Fire Prevention and Protection Plan and Noise Control Plan

CONDITION OF CERTIFICATION BIO-2
SUMMARY OF BIOLOGICAL MONITORING

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

Biological Resources
Mitigation Monitoring for the
Metcalf Energy Center

MONTHLY COMPLIANCE REPORT #31

April 2004

Prepared by:

CH2M HILL

2485 Natomas Park Drive, Suite 600

Sacramento, California 95833

METCALF ENERGY CENTER

MONTHLY COMPLIANCE REPORT

April 2004

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APPENDICES

- A) Cumulative Wildlife Species Observed in or Near the Project Area**
- B) Wildlife Observation Forms**
- C) WEAT Sign-ins**
- D) Photographs**

INTRODUCTION

The Metcalf Energy Center (MEC) site is located in the Santa Clara Valley within the Urban Service Area of south San Jose. The MEC will be a 600-megawatt natural-gas-fired combined cycle power plant with the following features:

- A 230-kilovolt (kV) switchyard and approximately 240 feet of new 230-kV transmission line that will loop into the existing Pacific Gas and Electric (PG&E) 230-kV Metcalf-Monta Vista No. 4 transmission on Tulare Hill.
- An approximately 1 mile, 16-inch natural gas pipeline that will connect to an existing PG&E transmission backbone pipeline that runs along the eastern side of U.S. 101.
- An approximately 1000-foot water pipeline from a tap into a new South Bay Water Recycling Program's (SBWR) pipeline for cooling water.
- An approximately 1.2-mile water pipeline will supply domestic and backup water supplies.
- A stormwater detention basin and discharge outfall structure to Fisher Creek.
- A new access road from Monterey Road at the Blanchard Road junction and visual screening and landscape corridor along the new access road that will require 6 acres of agricultural land south of the MEC site.
- A second access road (west access road) may extend from Santa Teresa Boulevard to the MEC site that will require 2.0 acres of agricultural land.
- Two temporary construction laydown yards totaling 24.8-acres are located in agricultural land south of the MEC site.

The project was designed to avoid significant adverse impacts to sensitive biological resources to the furthest extent feasible. Mitigation measures were developed through consultation with the U. S. Fish and Wildlife Service (USFWS), U. S. Army Corps of Engineers (Corps), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), and the San Francisco Bay Regional Water Quality Control Board (Water Board) to minimize unavoidable project impacts. Permits and authorizations from these agencies included conditions that must be monitored by the Designated Biologist. The Biological Monitor will be available during all phases of construction to ensure compliance with the mitigation measures outlined in the *Biological Resources Mitigation Implementation and Monitoring Plan* (BRMIMP). The following report includes all MEC project activities monitored during April 2004.

MONITORED MITIGATION MEASURES

Mitigation measures were developed through consultation with USFWS, NMFS, CDFG, Water Board, Corps, and California Energy Commission (CEC) for the MEC project. Compliance with any conditions of the Corps, Water Board, and CDFG permits will be included when permits are received and used on the project.

Conditions of Certification (COC) BIO-1 through BIO-13 were in compliance during April 2004.

The following conditions described in the USFWS Biological Opinion (BO) remained pertinent to the April monitoring efforts:

- Garbage must be removed from the site.
- Activity must be limited to the minimum necessary.
- The boundaries of the site will be clearly marked.
- All equipment, personnel, and access shall be confined to designated work areas and connecting roadways.
- Refueling will occur at least 50 feet away from aquatic habitats.
- Weekly California red-legged frog surveys will be conducted in work areas.
- Bullfrogs found during amphibian surveys, including adult, subadult, and larval bullfrogs, shall be captured and killed.
- The Biological Monitor will inspect the erosion control features during rain events or other water releases.
- Concrete trucks must be washed within a designated area with a surrounding berm.

All activities complied with conditions described in the NMFS BO. Work near Coyote Creek, where NMFS has jurisdiction over anadromous fish (salmon and steelhead), will likely occur in the summer 2004.

The Biological Monitor was available throughout the month to respond to biological issues as needed. April activities are described in the following section.

SUMMARY OF ACTIVITIES

This report includes project activities that took place during April 2004. Monitored site activities in April included continued site construction and archaeological presence/absence testing along the proposed wastewater pipeline. The following provides a description of these activities. A cumulative wildlife species list is included in Appendix A. Wildlife Observation forms are included in Appendix B. WEAT sign-in sheets are included in Appendix C. Relevant photographs are included in Appendix D. The Biological Monitor completes daily logs summarizing activities, personal interactions, and observations. These logs are available on request.

Site Construction

April main site construction included ongoing excavation for and installation of underground utilities, and continued installation of concrete foundations. In addition, aboveground infrastructure installation included the heat recovery steam generator (HRSG) ducts and other equipment. These activities will continue into May 2004.

The Biological Monitor visited the site periodically to inspect all construction activities. Monitoring visits focused on ensuring that work complied with CEC biological COCs and to determine future monitoring needs. Main site construction activity was limited to previously disturbed areas and remained outside the Fisher Creek riparian corridor.

Underground Utilities

Excavation and installation of underground utilities on the main site continued in April. Waterline pipes and electrical conduit were installed and open trenches were back-filled with concrete and/or soil. All open trenches and excavations include wildlife escape ramps and exposed pipe and conduit ends are capped to prevent wildlife entry. Utility installation will continue into May 2004.

Concrete Foundations

April activities included installation of concrete forms and rebar, and concrete pouring for heavy structure foundations. All concrete mixer trucks were cleaned in the designated concrete washout prior to leaving the project site. Foundation work will continue into May 2004.

Aboveground Infrastructure

Equipment continues to be transported from the laydown yards to the main site, where it is being installed on completed foundations. This work will continue into May 2004.

Active bird nests were discovered in equipment to be moved from the laydown yard this month. The equipment was identified for avoidance however the nests were disturbed. This issue is discussed in greater detail in the *General Notes and Observations* section.

Archaeological Presence/Absence Testing

In April, the cultural monitors began performing test pits along the proposed wastewater pipeline and secondary access road. The pipeline and road share an alignment that crosses agricultural fields from the main site, west to Santa Teresa Boulevard.

The test pits include numerous 6-8 feet deep, 2-3 feet wide, and 30-ft long trenches along the alignment. On April 16th, the Biological Monitor conducted a pre-construction survey at all of the proposed test pit locations. No biological issues were identified.

The cultural monitors proceeded to complete 38 test trenches. Trenches were backfilled at the end of each day. Test pit activities will likely continue in May 2004.

Gophers were encountered during test pit excavation. These observations are discussed in the *General Notes and Observations* section.

WORKER ENVIRONMENTAL AWARENESS TRAINING

The WEAT program was developed exclusively for the MEC project. Program materials include a handbook, video, and poster. As required by COC BIO-6 from the CEC *Commission Decision*, all new employees must attend the WEAT program.

One hundred-four personnel received WEAT training during April for a total of 1160 employees trained at MEC. A Calpine Site Safety Officer administered the WEAT training to all new April employees. A list of April WEAT attendees is included in Appendix C. Signed affidavits are kept on file by Calpine's Compliance Manager.

GENERAL NOTES AND OBSERVATIONS

Breeding Bird Activity

Breeding bird activity became the primary biological issue on the site in April. Construction activities are typically considered a disturbance and a deterrent to most wildlife activity. However, for birds, construction sites can actually provide nesting opportunities for several species.

Species such as killdeer (*Charadrius vociferus*) commonly nest in cleared and disturbed areas such as construction sites. Other birds such as house finches (*Carpodacus mexicanus*), rock doves (*Columba livia*), and mourning doves (*Zenaida macroura*) are opportunistic nesters and will establish nest sites in structures and stored equipment.

With a few exceptions, active bird nests (those containing eggs or chicks) are protected by the federal Migratory Bird Treaty Act and several CDFG codes. In many cases, avoidance is the only legitimate approach when an active nest is established on a construction site.

In April, active nests were found within the construction area and/or laydown yards for house finch and house sparrow (*Passer domesticus*). Site personnel also reported European starling (*Strunus vulgaris*) nesting activity, however an active nest was not observed. All house finch nests and house sparrow nests with eggs or young were identified for avoidance. The Biological Monitor removed several inactive and active house sparrow nests located in equipment in the south laydown yard. The site policy is to avoid all active nest containing eggs or young until the Biological Monitor can positively identify the species.

On April 15th, two house finch nests were discovered in equipment (filter house modules) stored in the south laydown yard. One nest was occupied by two chicks while the other included 5 eggs (observation forms in Appendix B). The equipment was scheduled for impending pressure cleaning and installation. However, site policy prevented disturbance of the active nests and therefore, the modules containing the nests were designated as off limits. The Biological Monitor and Environmental Compliance Manager discussed the possibility of relocating the nests in constructed nest boxes. The Designated Biologist contacted USFWS and CDFG seeking approval to relocate the nests. CEC biologists, Melinda Dorin and Stuart Itoga confirmed that disturbing the nest would not be permissible under project conditions to comply with both the Migratory Bird Treaty Act and CDFG codes. The nests and equipment were identified for avoidance until fledging was complete. MEC staff identified other stored filter house modules to replace the nest-occupied units during the avoidance period.

On April 26th, the MEC Environmental Compliance Manager reported the two finch nests as missing. Later that day, the Biological Monitor discovered that the nests had been removed from the filter house modules. The two finch chicks were missing and the eggs were no longer viable. It was unclear as to who may have removed the nests. The Project Biologist reported the incident to Stuart Itoga due to possible violation of nest protection laws. The incident was also reported to law enforcement officers, John Norris of CDFG and Sean Mann of USFWS.

Calpine is expected to receive a letter regarding the CEC's response to the matter in May. John Norris and Sean Mann requested copies of Calpine's response to the CEC letter along with additional training for site personnel. Calpine is prepared to cooperate with the CEC in resolving the incident and taking suggested measures to prevent possible recurrence. Calpine has already reacted by raising awareness and reinforcing the importance of avoiding nests. Warning signs and an educational poster are being produced and will be placed in select areas within the site.

Additional nests were identified onsite (Appendix B) and MEC confirmed their continued policy of active nest avoidance and have increased their efforts to deter birds from nesting in equipment with measures such as plugging and capping potential nesting sites.

On April 28th, a nestling carcass was discovered on a site foundation (Appendix B). The carcass was located underneath open-ended conduit where an active house sparrow nest may have been located. The Biological Monitor and site personnel had previously observed

house sparrows entering the conduit, located approximately 50-feet overhead, but an active nest was not directly observed. It is unlikely that loss of the chick was attributable to site activities.

On April 28th, the Biological Monitor returned a house sparrow nestling that had fallen from a nest located in an installed piece of equipment (pipe rack #2) recently moved from the south laydown yard. On April 29th, three house sparrow nestlings fell from the same nest. The incident was not attributable to site activities. The Biological Monitor was contacted and the area was avoided. The chicks later died due to nest failure. (Appendix B).

Other Observations and Notes

The Environmental Compliance Manager observed a gopher snake (*Pituophis melanoleucus*) on the main site on April 20th. The snake was followed until it exited the east side of the construction area. An associated wildlife observation form is included in Appendix B.

Two valley pocket gophers (*Thomomys bottae*) were encountered during the cultural test pit operation. On April 20th a gopher was injured by the backhoe machine during pit excavation. The animal was removed from the trench and placed in an adjacent agricultural field. On April 21st, another gopher was unearthed and fell into an open trench inundated with ground water. The animal could not be rescued due to safety concerns and drowned. These observations are included in Appendix B.

Northern rough-winged swallows (*Stelgidopteryx serripennis*) were observed for the first time in or near the site in April. The birds were observed foraging on the main site. This observation is included as a new addition to the cumulative species list found in Appendix A.

Calpine personnel continued to perform periodic SWPPP compliance inspections of project BMPs. The Biological Monitor will continue to aid the Calpine Environmental Compliance Manager in site preparation for rain events and ensure installed BMPs are in good repair and are functioning properly.

The Project Biologist helped schedule and attended two MEC Preserve field trips in April. Stuart Weiss, the project Bay checkerspot butterfly (*Euphydryas editha* ssp. *bayensis*) and nitrogen deposition expert, lead both trips. The first trip occurred on April 1st, and included members of the CEC biology staff. The second trip, on April 9th, included biologists from the Endangered Species Recovery and Habitat Conservation Planning departments of the Sacramento USFWS office, as well as a member of the local Sierra Club chapter, and a representative of the Santa Clara Valley Land Trust.

Nine bulls were released on the Tulare Hill portion of the MEC Ecological Preserve in early April as part of the preserve management plan. The release timing was coordinated through Stuart Weiss and rancher, Justin Fields. The cattle will likely remain on the hill for approximately four months.

APPENDIX A

Cumulative Wildlife Species Observed In or Near the Project Area

**Cumulative Wildlife Species Observed In or Near the Metcalf Energy Center Project and
Linear Facilities Area (May 2001 to April 30, 2004)**

Common Name	Scientific Name	Location
INSECTS		
Bay checkerspot butterfly	<i>Euphydras editha</i> spp. <i>Bayensis</i>	TH
Cabbage white butterfly	<i>Pieris rapae</i>	EC
Anise swallowtail butterfly	<i>Papilio zelicaon</i>	TH
Buckeye butterfly	<i>Precis coenia</i>	TH
Painted lady butterfly	<i>Vanessa cardui</i>	EC
Opler's longhorn moth	<i>Adela oplerella</i>	TH
Tarantula	<i>Eurypelma californicum</i>	TH
AMPHIBIANS AND REPTILES		
Pacific tree frog	<i>Hyla regilla</i>	TH, FC, EC
Arboreal salamander	<i>Aneides lugubris</i>	TH, EC
Western fence lizard	<i>Sceloporus occidentalis</i>	EC, TH, LA, FC
Side-blotched lizard	<i>Uta stansburiana</i>	EC
Southern alligator lizard	<i>Elgaria multicarinata</i>	EC, TH
Western skink	<i>Eumeces skiltonianus</i>	TH
Gopher snake	<i>Pituophis melanoleucus</i>	EC, LA, FC
BIRDS		
Pied-billed grebe	<i>Podilymbus podiceps</i>	FC, CC
American white pelican	<i>Pelecanus erythrorhynchos</i>	EC*
Double-crested cormorant	<i>Phalacrocorax auritus</i>	CC*
Canada goose	<i>Branta canadensis</i>	EC*, CC
Mallard	<i>Anas platyrhynchos</i>	FC, CC
Gadwall	<i>Anas strepera</i>	FC
Wood duck	<i>Aix sponsa</i>	FC, CC
Common merganser	<i>Mergus merganser</i>	FC
Hooded merganser	<i>Lophodytes cucullatus</i>	FC
American coot	<i>Fulica americana</i>	FC, CC
Great blue heron	<i>Ardea heroides</i>	FC
Green heron	<i>Butorides virescens</i>	FC, CC
Great egret	<i>Casmerodius albus</i>	FC
Snowy egret	<i>Egretta thula</i>	FC
Location: CC = Coyote Creek Riparian Corridor GP = Gas Pipe Line Corridor LA = Laydown Area CR = Coyote Ridge TH = Tulare Hill Ecological Preserve CTP = Construction Trade Parking Lot EC = Metcalf Energy Center Plant Site TL = Transmission Line Corridor SAR = Secondary Access Road Corridor FC = Fisher Creek Riparian Corridor WL = Water Line Corridor LEA = Laydown expansion area		
Notes: * Flyover or otherwise not utilizing area resources. Species in bold were recorded for the first time this month. ** Non-active sign (i.e. carcass, feather, nest, track)		

**Cumulative Wildlife Species Observed In or Near the Metcalf Energy Center Project and
Linear Facilities Area (May 2001 to April 30, 2004) (Continued)**

Common Name	Scientific Name	Location
BIRDS (continued)		
Turkey vulture	<i>Cathartes aura</i>	EC*, TH, LA
Killdeer	<i>Charadrius vociferus</i>	LA, LEA*, EC
White-tailed kite	<i>Elanus caeruleus</i>	FC
Northern harrier	<i>Circus cyaneus</i>	FC, TH
Golden eagle	<i>Aquila chrysaetos</i>	TH
Osprey	<i>Pandion heliaetus</i>	CC*, TH, EC, FC
Sharp-shinned hawk	<i>Accipiter striatus</i>	FC, TH
Cooper's hawk	<i>Accipiter cooperii</i>	CC, EC*, FC
Red-shouldered hawk	<i>Buteo lineatus</i>	EC, FC, LA, CC, LEA
Red-tailed hawk	<i>Buteo jamaicensis</i>	EC, FC, GP, TH, TL, CC
American kestrel	<i>Falco sparverius</i>	EC, TH
Prairie falcon	<i>Falco mexicanus</i>	TH
California quail	<i>Callipepla californica</i>	CC, GP
Spotted sandpiper	<i>Actitis macularia</i>	FC
Mourning dove	<i>Zenaida macroura</i>	EC, FC, TH, TL, CC
Rock dove	<i>Columba livia</i>	EC*, TH*
Anna's hummingbird	<i>Calypte anna</i>	TH, CC
Hummingbird sp.		EC, TH, FC
Belted kingfisher	<i>Ceryle alcyon</i>	FC, EC*, CC
Northern flicker	<i>Colaptes auratus</i>	EC, FC, TH
Nuttall's woodpecker	<i>Picoides nuttallii</i>	FC, FC**(nest), EC
Downy woodpecker	<i>Picoides pubescens</i>	EC, FC
Black phoebe	<i>Sayornis nigricans</i>	EC, FC, TL, LEA, CC
Say's phoebe	<i>Sayornis saya</i>	LEA
Western scrub-jay	<i>Aphelocoma californica</i>	EC, FC, LEA, CC
Common raven	<i>Corvus corax</i>	EC, TH, FC, CC
Horned lark	<i>Eremophila alpestris</i>	TH
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	EC
Cliff swallow	<i>Petrochelidon pyrrhonotta</i>	FC, FC**(nest), EC, TL
Barn swallow	<i>Hirundo rustica</i>	EC, LEA
Oak titmouse	<i>Baeolophus inornatus</i>	FC, CC
Location: CC = Coyote Creek Riparian Corridor CR = Coyote Ridge EC = Metcalf Energy Center Plant Site FC = Fisher Creek Riparian Corridor GP = Gas Pipe Line Corridor TH = Tulare Hill Ecological Preserve TL = Transmission Line Corridor WL = Water Line Corridor LEA = Laydown expansion area LA = Laydown Area CTP = Construction Trade Parking Lot SAR = Secondary Access Road Corridor		
Notes: * Flyover or otherwise not utilizing area resources. Species in bold were recorded for the first time this month. ** Non-active sign (i.e. carcass, feather, nest, track)		

**Cumulative Wildlife Species Observed In or Near the Metcalf Energy Center Project and
Linear Facilities Area (May 2001 to April 30, 2004) (Continued)**

Common Name	Scientific Name	Location
BIRDS (CONTINUED)		
Chestnut-backed chickadee	<i>Poecile rufescens</i>	FC
Bushtit	<i>Psaltiriparus minimus</i>	EC, FC, FC**(nest), GP, TL, CC
White-breasted nuthatch	<i>Sitta carolinensis</i>	FC
Bewick's wren	<i>Thryomanes bewickii</i>	FC, TH, CC
Rock wren	<i>Salpinctes obsoletus</i>	FC, TH
Ruby-crowned kinglet	<i>Regulus calendula</i>	TH, FC, CC
Northern mockingbird	<i>Mimus polyglottos</i>	EC, FC
Western bluebird	<i>Sialia mexicana</i>	FC, CC, EC, LEA
American robin	<i>Turdus migratorius</i>	LA, EC, CC
Loggerhead shrike	<i>Lanius ludovicianus</i>	TH, FC, EC, SAR
Western kingbird	<i>Tyrannus verticalis</i>	CC
European starling	<i>Strunus vulgaris</i>	LEA, FC, EC
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	EC
California towhee	<i>Pipilo crissalis</i>	EC, TH, FC, CC
Dark-eyed junco	<i>Junco hyemalis</i>	FC, TH, CC
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	EC, FC, TH, CC
Song sparrow	<i>Melospiza melodia</i>	EC, LA, LEA, FC
Yellow-rumped warbler	<i>Dendroica magnolia</i>	TH, FC, CC
Western meadowlark	<i>Sturnella neglecta</i>	EC, LA, TH
Red-winged blackbird	<i>Agelaius phoeniceus</i>	FC, SAR
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	FC, EC, CC, SAR
Bullock's oriole	<i>Icterus bullockii</i>	FC, FC**(nest), CC
House finch	<i>Carpodacus mexicanus</i>	EC, LA**, CC, FC, LEA**(nest)
American goldfinch	<i>Carduelis tristis</i>	LEA
Lesser goldfinch	<i>Carduelis psaltria</i>	EC, FC, CC, TH
House sparrow	<i>Passer domesticus</i>	EC, FC, CC, LEA**(nest)
MAMMALS		
Common raccoon	<i>Procyon lotor</i>	FC**(track)
Striped skunk	<i>Mephitis mephitis</i>	TH**(track)
Opossum	<i>Didelphis marsupialis</i>	EC
Location: CC = Coyote Creek Riparian Corridor CR = Coyote Ridge EC = Metcalf Energy Center Plant Site FC = Fisher Creek Riparian Corridor GP = Gas Pipe Line Corridor TH = Tulare Hill Ecological Preserve TL = Transmission Line Corridor WL = Water Line Corridor LEA = Laydown expansion area LA = Laydown Area CTP = Construction Trade Parking Lot SAR = Secondary Access Road Corridor		
Notes: * Flyover or otherwise not utilizing area resources. ** Non-active sign (i.e. carcass, feather, nest, track)		
		Species in bold were recorded for the first time this month.

**Cumulative Wildlife Species Observed In or Near the Metcalf Energy Center Project and
Linear Facilities Area (May 2001 to April 30, 2004) (Continued)**

Common Name	Scientific Name	Location
MAMMALS (CONTINUED)		
Coyote	<i>Canis latrans</i>	TH
Feral cat	<i>Felis catus</i>	EC
Bobcat	<i>Lynx rufus</i>	CC** (carcass)
California ground squirrel	<i>Spermophilus beechyi</i>	EC, FC, TH, TL
Western gray squirrel	<i>Sciurus griseus</i>	FC
Valley pocket gopher	<i>Thomomys bottae</i>	LA**(carcass), SAR
California vole	<i>Microtus californicus</i>	FC, EC
Deer mouse	<i>Peromyscus maniculatus</i>	TH, EC
Norway Rat	<i>Rattus norvegicus</i>	EC
Common muskrat	<i>Ondatra zibethicus</i>	FC
Black-tailed jackrabbit	<i>Lepus californicus</i>	EC, TH, CTP
Feral pig	<i>Sus scrofa</i>	CC**(carcass)
Tule elk	<i>Cervus nannodes</i>	CR
Black-tailed deer	<i>Odocoileus hemionus</i>	FC, GP, CC
Location: CC = Coyote Creek Riparian Corridor CR = Coyote Ridge EC = Metcalf Energy Center Plant Site FC = Fisher Creek Riparian Corridor GP = Gas Pipe Line Corridor TH = Tulare Hill Ecological Preserve TL = Transmission Line Corridor WL = Water Line Corridor LEA = Laydown expansion area LA = Laydown Area CTP = Construction Trade Parking Lot SAR = Secondary Access Road Corridor		
Notes: * Flyover or otherwise not utilizing area resources. ** Non-active sign (i.e. carcass, feather, nest, track)		
Species in bold were recorded for the first time		

APPENDIX B

Wildlife Observation Forms

Figure B-1: Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Merced Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Employee Name of employee:	LLoyD - Augrey - MARK SLOAN Boilermaker General F.M.
Date:	4/15/04
Location of observation: South lay down Area between A14 to A16 AND B2, C2, B3, C3	
Condition of wildlife: alive <input checked="" type="checkbox"/> dead <input type="checkbox"/>	
Species: BIRDS with babies	
Possible cause of injury or death:	
Where is the animal currently? AT LOCATION ABOVE	
Is the resource in danger of project (or other) impacts? NOT YET, BUT COULD IMPACT CALPINE WORK SCHEDULE	
Comments: IF WERE NOT OUT HERE WHEN THE PEOPLE SHOW UP CONTACT LLOYD Augrey's OFFICE AND THEY CAN CONTACT ME THANK YOU.	
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game and United States Fish and Wildlife Service to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2MHILL ADDRESS: 2485 Natomas Park Drive, St. 600, Sacramento, CA 95833	
USFWS CONTACT: Cecilia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

Figure B-1: Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Metcalf Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee:	
CHRISTOPHER CANZONIERI BREST RESEARCH ASSOCIATES	
Date:	
4/20/04 ~ 9:00 AM	
Location of observation:	
WITH IN PRESENCE/RESERVE TRENCH #2 FOR SEWER LINE	
Condition of wildlife:	
alive	<input checked="" type="checkbox"/> <input type="checkbox"/> dead
Species: RODENTIA - GROUND SQUIRREL	
Possible cause of injury or death:	
BACK LEFT LEG APPEARED BROKEN	
Where is the animal currently?	
ANIMAL WAS REMOVED FROM TRENCH PER TODD ELLWOOD'S REQUEST	
Is the resource in danger of project (or other) impacts?	
NOT CURRENTLY	
Comments:	
ANIMAL MOVED TO SAFE LOCATION w/ GRASS COVER	
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game and United States Fish and Wildlife Service to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2MHILL ADDRESS: 2485 Natomas Park Drive, St. 600, Sacramento, CA 95833	
USFWS CONTACT: Cecilia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

Figure B-1: Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found in Mercaft Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee: Kristen DKane	
Date: 4-20-04	
Location of observation: MEC site access road	
Condition of wildlife: alive <input checked="" type="checkbox"/> dead <input type="checkbox"/>	
Species: Gopher snake	
Possible cause of injury or death: N/A	
Where is the animal currently? The snake was escorted to the grassy area on the east side of the plant site.	
Is the resource in danger of project (or other) impacts? NO	
Comments:	
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game and United States Fish and Wildlife Service to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2MHILL ADDRESS: 2485 Natomas Park Drive, St. 600, Sacramento, CA 95833	
USFWS CONTACT: Cecilia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

Figure B-1. Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Mercaft Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee:	CHRISTOPHER CANZONIERI BAEIN RESEARCH ASSOCIATES
Date:	4/21/04
Location of observation:	PRESNCO / ALFANCES TESTING GAVETARY SEWER SOUTH OF BUNCHERED TRENCH #19
Condition of wildlife:	alive <input type="checkbox"/> dead <input checked="" type="checkbox"/>
Species:	RODENTIA - Gopher
Possible cause of injury or death:	
Where is the animal currently?	THE Gopher DROWNED BEFORE IT COULD BE RESCUED
Is the resource in danger of project (or other) impacts?	SOMEWHERE IN THE BACKFILL - WAS NOT RECOVERED
Comments:	NOT ANYMORE - ITS DEAD
<p>Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game and United States Fish and Wildlife Service to protect fish, wildlife and vegetation from construction impacts.</p> <p>DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385</p> <p>BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402</p> <p>COMPANY: CH2MHILL ADDRESS: 2485 Natomas Park Drive, St. 600, Sacramento, CA 95833</p> <p>USFWS CONTACT: Cecilia Brown (916) 414-6625</p> <p>CDFG CONTACT: Mark Imsdahl (707) 944-5512</p>	

Figure B-1. Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Metcalf Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee:	ROBERT SORENSON - CALPINE
Date:	4-26-04
Location of observation:	HRSG #2 COL. 14.1 A ROOF BEAM
Condition of wildlife:	
alive <input type="checkbox"/>	dead <input type="checkbox"/> 4 BIRD EGGS IN NEST
Species:	
Possible cause of injury or death:	N/A
Where is the animal currently?	HRSG #2 COL. 14.1 A ROOF BEAM
Is the resource in danger of project (or other) impacts?	NOT AT THIS TIME
Comments:	
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS) to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2M ADDRESS: 2485 Natomas Park Drive, St. 600	
USFWS CONTACT: Cecilia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

Figure B-1. Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Metcalf Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee:	Kristen O'Kane
Date:	4-28-04
Location of observation:	West side of STG on cement.
Condition of wildlife:	
alive <input type="checkbox"/>	dead <input checked="" type="checkbox"/>
Species:	Baby bird
Possible cause of injury or death:	Fell from nest in equipment above.
Where is the animal currently?	On concrete foundation.
Is the resource in danger of project (or other) impacts?	NO.
Comments:	Connie Conway notified me that the bird was there but was already dead. I notified Todd Ellwood by phone.
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS) to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2M- ADDRESS: 2485 Natomas Park Drive, St. 600	
USFWS CONTACT: Cecilia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

Figure B-1: Wildlife Observation Form

WILDLIFE OBSERVATION FORM	
To Record Animals Found In Metcalf Energy Center Project Areas	
To be filled out by personnel who find active nest sites and burrows, dens, and dead or injured wildlife, or other biological resources during daily construction activities.	
Name of employee:	Kristen Okane
Date:	4/29/04
Location of observation:	unit #2 pipe racks on concrete foundation.
Condition of wildlife:	alive <input type="checkbox"/> dead <input checked="" type="checkbox"/>
Species:	(3) newborn chicks (probably House Sparrows)
Possible cause of injury or death:	The chicks appear to have fallen out of the nest.
Where is the animal currently?	The Biological Monitor instructed me to place them in the Riparian Corridor.
Is the resource in danger of project (or other) impacts?	NO. The nest is still intact. There is no work occurring in the vicinity.
Comments:	
Please contact the Designated Biologist for questions and to report any wildlife, nest, or den in the project area that could be disturbed. The Designated Biologist will advise personnel on measures required by California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS) to protect fish, wildlife and vegetation from construction impacts.	
DESIGNATED BIOLOGIST: Debra Crowe (916) 920-0212 ext. 385	
BIOLOGICAL FIELD MONITOR: Todd Ellwood (408) 839-2402	
COMPANY: CH2MHILL ADDRESS: 2485 Natomas Park Drive, St. 600	
USFWS CONTACT: Cecelia Brown (916) 414-6625	
CDFG CONTACT: Mark Imsdahl (707) 944-5512	

APPENDIX C

WEAT Sign-In Sheets

6

Date: 04.05.04

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

Instructor/s: Monnell

8

Date: 04.06.04

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

Instructor/s: Nhommue

METCALF ENERGY CENTER ENVIRONMENTAL TRAINING SIGN-IN SHEET

(Biology, Archaeology, & Paleontology)

Date: 04.12.04

PLEASE NOTE:

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

	NAME (PRINT)	NAME (SIGNATURE)	COMPANY	FOR OFFICE USE ONLY			
				W OR D	EMP ID #	BADGE #	PARK PERMIT #
2	YOUSSEF RICH	<i>Youssef Rich</i>	ABRY	W	00266	—	—
3	JACK Grehman	<i>Jack Grehman</i>	ABRY	W	00267	—	—
4	RAY C. WHEELER	<i>Ray C. Wheeler</i>	"	W	00268	—	—
5	HAROLD DAVIS	<i>Harold Davis</i>	BIGGE	W	00269	—	—
6	STEVE BOGUE	<i>Steve Bogue</i>	PSE	D	588	16886	0138
7	STEVE FELDBAUSCH	<i>Steve Feldbausch</i>	NSE	—	—	—	—
7	DAVE MICHL	<i>Dave Michl</i>	NSE	D	589	16887	0149
8	TRAVIS THOMPSON	<i>Travis Thompson</i>	NSE	—	—	—	—
8	STEVE POWELL	<i>Steve Powell</i>	NSE	D	590	16888	0150
9	JOHN NOLAN	<i>John Nolan</i>	RANGER	D	591	16889	0151
10	PETER CUDDIHY	<i>Peter Cuddihy</i>	RANGER PIPELINES	D	592	16890	0152
11	KEITH BOSTICK	<i>Keith Bostick</i>	AVS	W	00270	—	—

Instructor/s: *M. Munnell*

METCALF ENERGY CENTER ENVIRONMENTAL TRAINING SIGN-IN SHEET

(Biology, Archaeology, & Paleontology)

Date: 04.13.04

PLEASE NOTE:

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

			FOR OFFICE USE ONLY			
NAME (PRINT)	NAME (SIGNATURE)	COMPANY	W OR D	EMP ID #	BADGE #	PARK PERMIT #
✓ STEVE GREVSTAD	<i>Steve Grevstad</i>	NISE	W	00272	—	—
✓ HANIF AMMAR	<i>Hanif Ammar</i>	Redwood PAINTING				
✓ Ken Ravis	<i>Ken Ravis</i>	Redwood Ptg.				
✓ OSEAR MENDEZ	<i>Osear Mendez</i>	Redwood Ptg.				
✓ Steadman, James	<i>James Steadman</i>	SSC	W	00273	—	—
✓ JOSEPH J. FATA	<i>Joseph J. Fata</i>	NSE	D	593	16891	0153
✓ RUSS MCARY	<i>Russ Mcary</i>	STROCAL INC.	D	1594	16892	0154
✓ BRIAN BRYANT	<i>Brian Bryant</i>	STROCAL BRYANT SURVEYS	W	00274	—	—
✓ Sean Bryant	<i>Sean Bryant</i>	Strocal/BSI	W	00275	—	—
✓ TERRY TENNANT	<i>Terry Tennant</i>	NATIONAL STEEL	W	00276	—	—
✓ COREY MESERVE	<i>Corey Meserve</i>	NATIONAL STEEL	W	00277	—	—
✓ ROBERT HAWKS	<i>Robert Hawks</i>	National Steel	W	00278	—	—
✓ SABAH B. KHOSHABA	<i>Sabah B. Khoshaba</i>	NATIONAL STEEL	W	00279	—	—
✓ LARRY HOLMQUIST	<i>Larry Holmquist</i>	National Steel	W	00280	—	—
✓ THOMAS J. BETTENCOURT	<i>Thomas J. Bettecourt</i>	NATIONAL STEEL	W	00281	—	—
✓ Mike Kennedy	<i>Mike Kennedy</i>	NATIONAL STEEL	W	00282	—	—
✓ Gina Pinnell	<i>Gina Pinnell</i>	NATIONAL STEEL	D	595	16893	0155
✓ Gerald Hollins	<i>Gerald Hollins</i>	Nat. Steel Encl.	W	00283	—	—
✓ Rodolfo FUENTES	<i>Rodolfo Fuentes</i>	MET CALF NSE	W	00284	—	—

Instructor/s: *[Signature]*

(Biology, Archaeology, & Paleontology)

PLEASE NOTE:

[illegible]

Instructor/s:

METCALF ENERGY CENTER ENVIRONMENTAL TRAINING SIGN-IN SHEET

(Biology, Archaeology, & Paleontology)

Date: 04.19.04

PLEASE NOTE:

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

NAME (PRINT)	NAME (SIGNATURE)	COMPANY	FOR OFFICE USE ONLY			
			W OR D	EMP ID #	BADGE #	PARK PERMIT #
ROBERT DRAKE	<i>Robert Drake</i>	Hershberger/Stronach	W	00287	—	—
LINN DEAR	<i>Linn Dear</i>	Dielco Crane	W	00288	—	—
Pete Foote	<i>Pete Foote</i>	RANGER PIPELINE	W	00289	—	—
Curtis D. Richards	<i>Curtis D. Richards</i>	PSF	W	00290	—	—
RANDY MARR	<i>Randy Marr</i>	PSF	W	00291	—	—
Tim Hayward	<i>Tim Hayward</i>	PSF	W	00292	—	—
LES MOTYIENSKI	<i>Les Motyienksi</i>	PSF	W	00293	—	—
Denny Fennell	<i>Denny Fennell</i>	Seim	W	00294	—	—
Richard Green	<i>Richard Green</i>	Seim	W	00295	—	—
William J. McKee	<i>William J. McKee</i>	NSE	W	00296	—	—
JOSE L. PEREZ	<i>Jose L. Perez</i>	LLOYD W. AUBRY	W	00297	—	—
JERRY VADNANIS	<i>Jerry Vadnanis</i>	NSE	W	00298	—	—
JACK HOWARD	<i>Jack Howard</i>	NSE	W	00299	—	—
Robert Perez Sanchez	<i>Robert Perez Sanchez</i>	N. E. Ent.	W	00300	—	—
Raul Moreno	<i>Raul Moreno</i>	NSE	W	00301	—	—
Sally Diaz	<i>Sally Diaz</i>	NSE	W	00302	—	—
Perla H. Luna	<i>Perla H. Luna</i>	NSE	W	00303	—	—
Murto Reynoso	<i>Murto Reynoso</i>	BIGGE CRANE	D	567	16865	01660
Jim Morgan	<i>James Morgan</i>	BIGGE CRANE	W	00353	—	—

~~Tom Trent~~

~~Harold Buckstrom~~

~~Francis [unclear]~~

~~David Buckstrom~~

~~David Buckstrom~~

Instructor/s:

~~Bigge Crane~~

[Signature]

(Biology, Archaeology, & Paleontology)

Date:

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

FOR OFFICE USE ONLY

Instructor/s:

Amonee

METCALF ENERGY CENTER ENVIRONMENTAL TRAINING SIGN-IN SHEET

(Biology, Archaeology, & Paleontology)

Date: 04.20.04

PLEASE NOTE:

By signing below, I acknowledge that I have attended the Worker Environmental Awareness Training Program for the Metcalf Energy Center Project, and I agree to comply with all the environmental requirements presented.

NAME (PRINT)	NAME (SIGNATURE)	COMPANY	FOR OFFICE USE ONLY			
			W OR D	EMP ID #	BADGE #	PARK PERMIT #
Bruce Flowers	<i>[Signature]</i>	AUS Services	D	599	16897	
JUAN MARTINEZ	<i>[Signature]</i>	ALUMA SYSTEMS	W	00305	—	—
Yuri Teixeira	<i>[Signature]</i>	Aluma Systems	W	00306	—	—
JOHNSON, Bob	<i>[Signature]</i>	Aluma Systems	W	00307	—	—
Gregory Foster	<i>[Signature]</i>	National Steel	W	00308	—	—
Scott Stevenson	<i>[Signature]</i>	NSE	W	00309	—	—
ANTHONY P. CONTE	<i>[Signature]</i>	NSE	W	00310	—	—
Keith James	<i>[Signature]</i>	NSE	W	00311	—	—
Tim Powers	<i>[Signature]</i>	NSE	W	00312	—	—
Ray Tucker	<i>[Signature]</i>	SHEEDY	W	00313	—	—
SALVADOR Hernandez	<i>[Signature]</i>	CONCO	W	00314	—	—
JOSE OREGAÑO	<i>[Signature]</i>	CONCO	W	00315	—	—
Jose L. Perez	<i>[Signature]</i>	CONCO	W	00316	—	—
CHRISTOPHER MEYER	<i>[Signature]</i>	ENERGY COMMISSION	D	598	16896	0160

Instructor/s: *[Signature]*

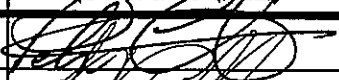
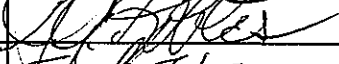
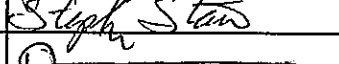
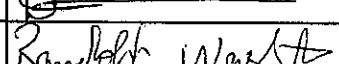
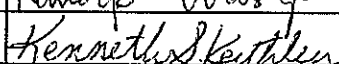
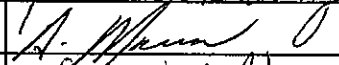
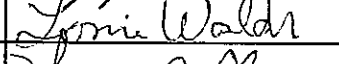
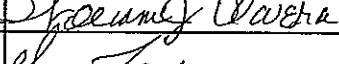
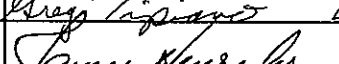





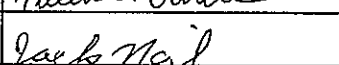
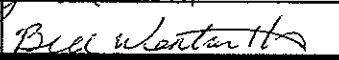


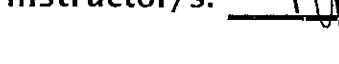
METCALF ENERGY CENTER ENVIRONMENTAL TRAINING SIGN-IN SHEET

(Biology, Archaeology, & Paleontology)

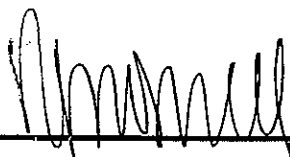
Date: 04.26.04

PLEASE NOTE:

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			FOR OFFICE USE ONLY			
NAME (PRINT)	NAME (SIGNATURE)	COMPANY	W OR D	EMP ID #	BADGE #	PARK PERMIT #
PETER SPEED		HEAT TREATING INC.	W	00331	—	—
Guadalupe A. Flores		ALUMA SYSTEM	W	00332	—	—
Stephen Staves		NATIONAL STEEL	W	00333	—	—
Dennis McKnight		AUS	D	099	60298	0164
Randolph Washington		Aubrey	W	00334	—	—
KENNETH S. KEITHLEY		Aubrey	W	00335	—	—
ARNIE MORROW		L.W. Aubrey	W	00336	—	—
Lonnie Walden		LW AUBREY	W	00337	—	—
WILLIAM J. OLIVERA		L.W. Aubrey	W	00338	—	—
GREG TRIPIANO		LLOYD AUBREY	W	00339	—	—
James Henderson		Lloyd Aubrey	W	00340	—	—
Bernie Hopkins		Lloyd Aubrey	W	00341	—	—
Bill Miller		Lloyd Aubrey	W	00342	—	—
Jerry Miller		Lloyd Aubrey	W	00343	—	—
JULIO LOPEZ		ALAMINCO STEEL	W	00344	—	—
JOHN CASTIGNANI		LLOYD AUBREY	W	00345	—	—
William A. Anderson		LLOYD AUBREY	W	00346	—	—
JACK NAIR		LLOYD AUBREY	W	00347	—	—
Bill Warr Swarth		Sheedy	W	00348	—	—

Instructor/s: _____



(Biology, Archaeology, & Paleontology)

Date: 04-27-04

PLEASE NOTE:

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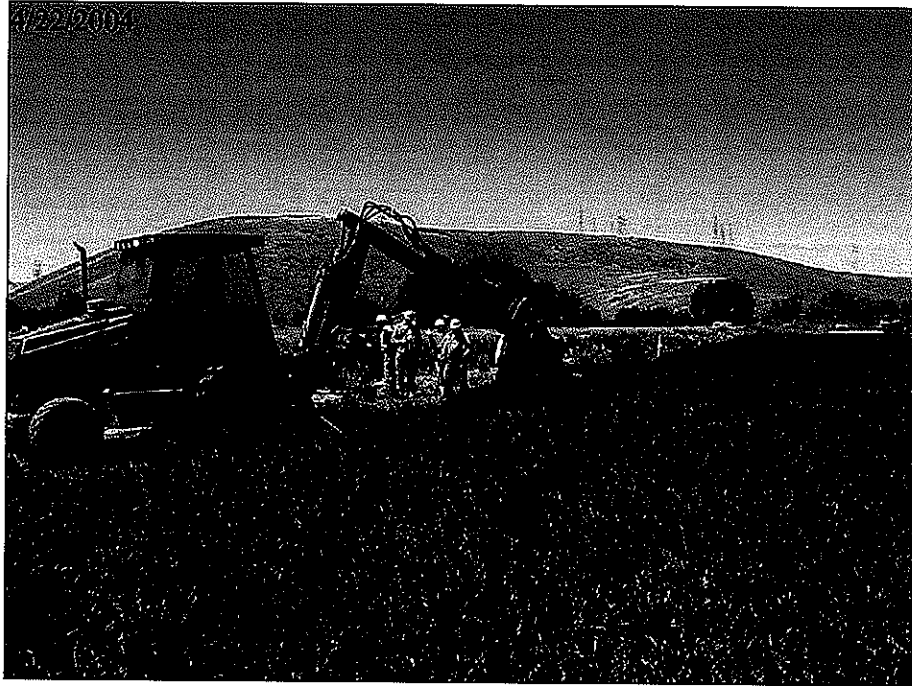
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Instructor/s:

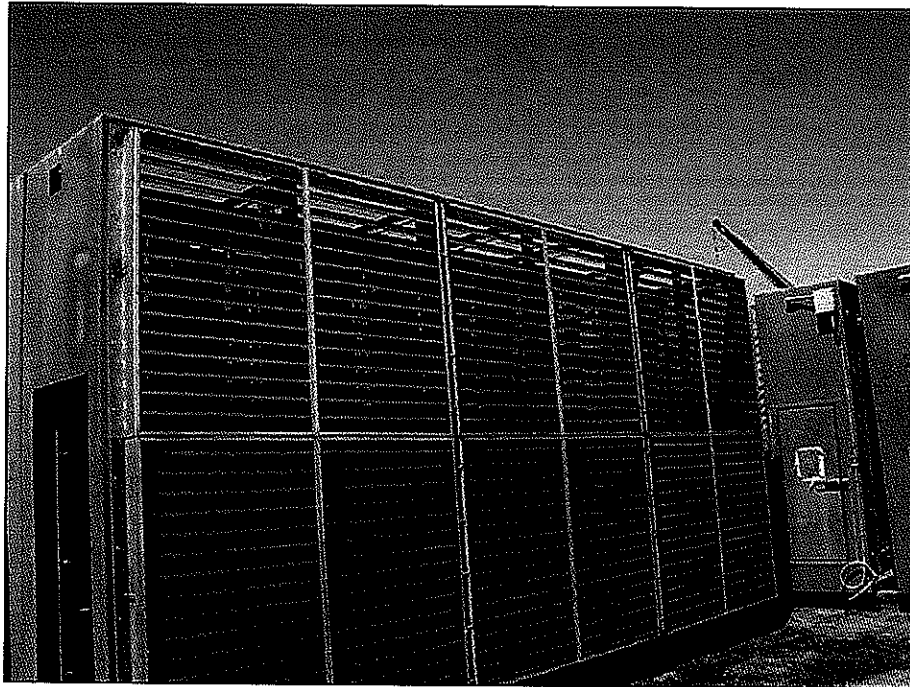
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APPENDIX D

Photographs



Cultural Pit Testing



Filter House Module Similar to Those Containing House Finch Nests



Bay Checkerspot Butterfly Observed On MEC Preserve

CONDITION OF CERTIFICATION CUL-7
WEEKLY SCHEDULES

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

CONDITION OF CERTIFICATION PAL-4
PALEO MONTHLY SUMMARY REPORT

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

**Metcalf Energy Center Project
Paleontological Resource Monitoring and Mitigation Program**

Monthly Report

Project Name: Metcalf Energy Center (MEC)

Project Number: 01-17

Clients: Calpine/CH2M Hill

Month: April 2004

Designated Paleontological Resource Specialist: Dr. Lanny H. Fisk, PhD, RG

Monthly Report for April 2004:

During the month of April 2004, PaleoResource Consultants (PRC) continued to work with Calpine Corporation through their environmental consultants, CH2M Hill, to mitigate potential adverse impacts to paleontological resources (fossils) which might result from construction of the Metcalf Energy Center (MEC) and associated linear facilities (including a natural gas pipeline, cooling-water supply line, and electrical transmission line) all located in south San Jose, California. During April 2004, the only ground disturbance at the MEC plant site needing to be monitored were three sixteen (16) feet deep borings. These excavations were monitored by PRC paleontological resource monitor Brent J. Butler.

All three deep borings at the MEC plant site disturbed primarily engineered fill up to twelve (12) feet deep and only four (4) feet of interbedded alluvial sediments. These fine-grained alluvial sediments consisted of dark brown silty clay. No paleontological resources were discovered during monitoring.

Calpine Environmental Compliance Manager Kristen O'Kane continues to notify PRC regarding any scheduled excavations that would impact previously undisturbed sediments, asking if we think that paleontological monitoring is necessary. In most cases, since these excavations would only impact a few feet of undisturbed sediments and since paleontological resources have not previously been discovered at such shallow depths at MEC, we have responded that, in our professional opinion, no monitoring is necessary. However, PRC paleontological monitors are available and "on-call" to monitor or spot check deeper excavations at the MEC plant site or other earth-moving activities related to the MEC project.

CONDITION OF CERTIFICATION SOCIO-1
LIST OF PLANNED PROCUREMENT

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

SOCIO-1: List of planned procurement of materials or hiring outside the local regional area during the next two months.

Material/equipment	Manufacturer	Point of Origin	Reason
Fire pumps	Mechanical Equipment, Co.	North Carolina	Not available locally / National Service Agreement
Instrument transmitters	Rosemount, Inc. (Emerson)	Minnesota	Not available locally / National Service Agreement
Flow elements	Fluidic Technologies	Texas	Not available locally / National Service Agreement
Cooling tower chemical feed equip.	Reetex, LTD.	Houston, TX	Not available locally / National Service Agreement
Cycle chemical feed equip.	Reetex, LTD.	Houston, TX	Not available locally / National Service Agreement
Lube oil conditioner	Gulfgate	Houston, TX	Not available locally / National Service Agreement
Sample panel	Sentry Equipment Corporation	Oconomowoc, WI	Not available locally / National Service Agreement
Caiso rig & metering equipment	Alston Esca	Washington	Not available locally / National Service Agreement

CONDITION OF CERTIFICATION GEN-6
CBO Approval of Special Inspector

METCALF ENERGY CENTER
MONTHLY COMPLIANCE REPORT

71.1.1



Metcalf Energy Center

April 21, 2004

Mr. Hans Kosten
Willdan/AIMS
1 Blanchard Road
San Jose, CA 95013

Re: Metcalf Energy Center
Condition of Certification GEN-6, Special Inspector

Dear Mr. Kosten:

In accordance with Condition of Certification GEN-6, enclosed for your approval is a resume for Mr. Jeff Patterson, concrete field testing technician with Signet. If approved, Mr., Patterson will serve as a concrete Special Inspector during construction of the Metcalf Energy Center.

Your expeditious review and approval is requested. If you have any questions or otherwise require additional information, please contact Terence Robertson at (408) 361-4853.

Sincerely,

Nicholas LaPorte
Project Manager

Enclosures

cc: Terence Robertson, Calpine
Kristen O'Kane, Calpine
Document Control, Calpine

APPROVED
WILLDAN DATE: 5/21/04
BY: [Signature]
DELEGATE CHIEF BUILDING OFFICIAL FOR
THE CALIFORNIA ENERGY COMMISSION

JEFF PATTERSON
Investigation/Special Test Technician

EXECUTIVE SUMMARY

EXPERIENCE:

Mr. Patterson performs concrete sampling, proof-load testing of epoxied/grouted anchors, in-place brick shear testing in unreinforced masonry buildings and investigative examinations needed for seismic studies and analyses. His work involves the instrumentation and application for load/pressure measurement and deflections. His vast experience in the industry and as a machinist helps him in the designing and fabrication of special fixtures and test set-ups encountered in various job situations.

PROFESSIONAL AFFILIATIONS:

➤ *Construction Inspection Association*

CERTIFICATIONS:

➤ *American Concrete Institute (ACI)*
○ Field Testing Technician, Grade I

PROJECT EXPERIENCE:

Asian Art Museum, San Francisco, CA
PacBell Building Investigation, San Francisco, CA
Pacific Presbyterian Medical Center, San Francisco, CA
Kaiser Hospitals, Richmond, Oakland, Hayward, Fremont, CA
Alameda Hospital, Alameda, CA
Mercy Family Plaza, San Francisco, CA
Community Psychiatric Center, Fremont, CA
Highland Hospital, Oakland, CA
Children's Hospital, Oakland, CA
Alta Bates Hospital, Berkeley, CA
St. Rose Hospital, Hayward, CA
Diablo Unified School District, CA
Richmond Unified School District, CA
Hayward Unified School District, CA
Fairfield Unified School District, CA
S. F. International Airport, San Francisco, CA
San Jose International Airport, CA
UC Berkeley Latimer Hall, Berkeley, CA
UC Berkeley LaLoma Project, Berkeley, CA
McAteer High School, San Francisco, CA
Marina Middle School, San Francisco, CA

SIGNET TESTING LABS

AMERICAN CONCRETE INSTITUTE

This is to certify that

JEFF PATTERSON

*has demonstrated knowledge and ability by
successfully completing the ACI certification
requirements and is hereby recognized as an*

ACI CONCRETE FIELD TESTING TECHNICIAN - GRADE I

Certified Date: 3/13/04

Expires: 3/13/09

Examiner:

